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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/673,932

09/29/2003

Teck Hu

17

1634

7590 03/27/2008  
Docket Administrator (Room 3J-219)  
Lucent Technologies Inc.  
101 Crawfords Corner Road  
Holmdel, NJ 07733-3030

EXAMINER

NGUYEN, KHAI MINH

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

03/27/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/673,932	<b>Applicant(s)</b> HU, TECK	
	<b>Examiner</b> KHAI M. NGUYEN	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-16 and 18-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-13 and 25-32 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 14-16 and 18-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's arguments with respect to claims 1-3, 6-16, and 18-32 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 6, 14-16, and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over ETSI TS 122 146 V.5.2.0 (2002-2003) in view of Suzuki (U.S.Pat-5850527) and further in view of Trossen et al. (U.S.Pub-20040176103).

Regarding claim 1, ETSI teaches a method of wireless communication with a number of subscribers to a subscription-based service (fig.2, pages 7-8, section 4.2), the method comprising:

determining the number of multicast service subscribers within a cell (home environment) (section 3.1 (multicast area), section 4.2, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising);

determining at least one of a geographical distribution of a number of multicast service subscribers (section 3.1 (multicast area)) and a subscription distribution of the number of multicast service subscribers within the cell (home environment) (fig.2, pages 7-8, section 4.2, multimedia service, operator specific services, movie/music streaming, live web casting, TV news/sports/advertising); and

ETSI fails to specifically disclose assigning one of a plurality of service rates to at least one of a plurality of subscription-based service types, said one of the plurality of service rates being selected based on at least one of channel conditions, power requirements, service subscription type, desired content, other services and equipment class of each subscriber and said one of the plurality of service rates further being selected based on at least one of the determined geographical distribution (not show) and the determined subscription distribution (not show). However, Suzuki teaches assigning one of a plurality of service rates to at least one of a plurality of subscription-based service types (col.5, line 63 to col.6, line 9), said one of the plurality of service rates being selected based on at least one of channel conditions (col.5, line 63 to col.6, line 15), power requirements, service subscription type, desired content, other services (col.11, lines 21-30) and equipment class of each subscriber and said one of the plurality of service rates further being selected based (col.11, lines 21-30) on at least one of the determined geographical distribution (not show) and the determined

subscription distribution (not show). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Suzuki to ETSI to be decided in accordance with the quality and value of the provided information.

ETSI and Suzuki fail to specifically disclose based on at least one of the determined geographical distribution and the determined subscription distribution. However, Trossen teaches based on at least one of the determined geographical distribution ([0025]) and the determined subscription distribution ([0025]). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Trossen to ETSI and Suzuki to provide a method for transmitting multicast over a wireless channel.

Regarding claim 15, ETSI teaches a method of wireless communication comprising:

receiving a subscription-based service at an assigned service rate (section 5.2.1), the assigned service rate corresponding with at least one of a plurality of service subscription types and being selected from a plurality of service rates based on at least one of desired content, channel conditions, power requirements (not show), other services and equipment class and the assigned service rate further being selected based on at least one of a determined geographical distribution of a number of multicast service subscribers (not show) and a determined subscription distribution of the number of multicast service subscribers within the cell (not show).

ETSI fails to specifically disclose the assigned service rate corresponding with at least one of a plurality of service subscription types and being selected from a plurality of service rates based on at least one of desired content, channel conditions, power requirements (not show), other services and equipment class and the assigned service rate further being selected based on at least one of a determined geographical distribution of a number of multicast service subscribers (not show) and a determined subscription distribution of the number of multicast service subscribers within the cell (not show). However, Suzuki teaches the assigned service rate corresponding with at least one of a plurality of service subscription types (col.5, line 63 to col.6, line 9) and being selected from a plurality of service rates (col.5, line 63 to col.6, line 15) based on at least one of desired content (col.11, lines 21-30), channel conditions, power requirements (not show), other services and equipment class and the assigned service rate further being selected based (col.11, lines 21-30) on at least one of a determined geographical distribution of a number of multicast service subscribers (not show) and a determined subscription distribution of the number of multicast service subscribers within the cell (not show). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Suzuki to ETSI to be decided in accordance with the quality and value of the provided information.

ETSI and Suzuki fail to specifically disclose based on at least one of the determined geographical distribution and the determined subscription distribution. However, Trossen teaches based on at least one of the determined geographical distribution ([0025]) and the determined subscription distribution ([0025]). Therefore, it

would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Trossen to ETSI and Suzuki to provide a method for transmitting multicast over a wireless channel.

Regarding claim 2, ETSI, Suzuki, and Trossen further teach the method of claim 1, wherein the subscription-based service comprises at least a multicast service (see ETSI, section 3.1 (multicast area), section 4.2), the at least one service rate comprises at least one multicast rate, and said at least one of the subscription-based service type comprises at least a multicast service subscription type (see Suzuki, col.5, line 63 to col.6, line 15).

Regarding claim 3, ETSI, Suzuki, and Trossen further teach the method of claim 2, wherein the multicast service subscription type comprises at least one of a basic type and a premium type (see Suzuki, col.13, lines 24-44).

Regarding claim 6, ETSI, Suzuki, and Trossen further teach the method of claim 2, comprising: multicasting information to each of the multicast service subscribers at each multicast service subscription type's assigned multicast rate (see Suzuki, col.5, line 63 to col.6, line 15).

Regarding claim 14, ETSI, Suzuki, and Trossen further teach the method of claim 2, wherein the other services comprise at least one of voice, HSDPA and HSUPA (see ETSI, section 4.2, and section 4.2.1).

Regarding claim 16, ETSI, Suzuki, and Trossen further teach the method of claim 15, wherein the subscription-based service comprises at least a multicast service, the at

least one service rate comprises at least one multicast rate (see Suzuki, col.5, line 63 to col.6, line 15), and the service subscription type comprises at least a multicast service subscription type (see ETSI, section 5.2.1).

Regarding claim 18, ETSI, Suzuki, and Trossen further teach the method of claim 16, wherein the multicast service subscription type comprises at least one of a basic type and a premium type (see Suzuki, col.5, line 63 to col.6, line 15).

Regarding claim 19, ETSI, Suzuki, and Trossen further teach the method of claim 16, comprising: prioritizing the other services and the multicast service subscription service (see Suzuki, col.5, line 63 to col.6, line 15).

Regarding claim 20, ETSI, Suzuki, and Trossen further teach the method of claim 19, comprising: scaling the multicast service subscription types available for assigning in response to a change in demand for the other services (see Suzuki, col.11, lines 21-30 and col.13, lines 24-44).

Regarding claim 21, ETSI, Suzuki, and Trossen further teach the method of claim 20, wherein the step of scaling comprises at least one of dropping and adding support for at least one of the multicast service subscription types (see Suzuki, col.11, lines 21-30 and col.13, lines 24-44).

Regarding claim 22, ETSI, Suzuki, and Trossen further teach the method of claim 21, wherein the demand corresponds with at least one of power, channelization codes (see ETSI, section 5.2.1,, and subscription fees (see Suzuki, col.6, lines 56-59).



Regarding claim 23, ETSI, Suzuki, and Trossen further teach the method of claim 19, wherein the other services comprise at least one of voice, HSDPA and HSUPA (see ETSI, section 4.2, and section 4.2.1).

Regarding claim 24, ETSI, Suzuki, and Trossen further teach the method of claim 16, wherein the equipment class corresponds with at least one supporting channelization code (see Suzuki, col.5, line 63 to col.6, line 15).

***Allowable Subject Matter***

3. Claims 7-13 and 25-32 are allowed.

Applicant's independent claim 7: The present in invention is directed to a method of wireless communication with a number of subscribers to a subscription-based service, the independent claim identifies the patentably distinct feature "prioritizing the assigning of the at least one multicast rate to support the multicasting information to at least one of a maximum number of multicast service subscribers, a maximum number of multicast service subscribers having the premium service type, and a maximum number of multicast service subscribers having the basic service type; and multicasting information to each of the multicast service subscribers at each multicast service subscription type's assigned multicast rate". Applicant's independent claim 7 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claim 25: The present in invention is directed to A method of wireless communication with a number of subscribers to a subscription-based service, the independent claim identifies the patentably distinct feature "assigning at least one second service rate to at least one second subscription-based service type

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associated with at least one second subscriber, said at least one second service rate differing from said at least one first service rate and being selected based on information indicative of network infrastructure demands associated with said at least one second subscriber; and concurrently multicasting information to said at least one first subscriber and said at least one second subscriber at said at least one first service rate and said at least one second service rate, respectively". Applicant's independent claim 25 comprises a particular combination of elements, which is neither taught nor-suggested by prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI M. NGUYEN whose telephone number is (571)272-7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571.272.7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/  
Supervisory Patent Examiner, Art  
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8/24/2008